

Google scholar

transient current testing power supply

Search

[Advanced Scholar Search](#)[Scholar Preferences](#)☒ Search only in Engineering, Computer Science, and Mathematics☐ Search in all subject areas

Scholar



Articles excluding patents ▼

1970

- 2000

include citations ▼

Results 1 - 20 of about 14,900. (0.26 sec)

[CITATION] Transient power supply current testing of digital CMOS circuitsRZ Makki, ST Su, T Nagle - *Test Conference, 1995. Proceedings., International, 1995*[Cited by 72](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)**[CITATION] Defect detection with transient current testing and its potential for deep sub-micron CMOS ICs**M Sachdev, P Janssen, V Zieren - *Test Conference, 1998. Proceedings., ..., 1998*[Cited by 71](#) - [Related articles](#) - [All 2 versions](#)**Transient power supply current monitoring—a new test method for CMOS VLSI circuits**ST Su, RZ Makki, T Nagle - *Journal of Electronic Testing, 1995* - Springer

... **Transient Power Supply Current Monitoring—A New Test Method for CMOS VLSI Circuits** ... We use the **transient power supply current** as indicative of such switching. The iDDT **test** approach is not meant to compete or replace other **test** methods, but is meant to augment them. ...

[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)**[CITATION] Defect detection using power supply transient signal analysis**A Gemida, Z Yan, JF Plusquellic, F Muradali - *Test Conference, 1999. Proceedings., ..., 1999*[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)[psu.edu](#) (PDF)**Testing of static random access memories by monitoring dynamic power supply current**ST Su, RZ Makki - *Journal of Electronic Testing, 1992* - Springer

... It has also been addressed, in part, by attempting the detection of the **transient** (dynamic) component, /dd, of the **power supply current** using off-chip sensors [13].

In this article, we extend the idea of ldaa **testing** to lda **testing**. ...

[Cited by 35](#) - [Related articles](#) - [All 2 versions](#)**[CITATION] V2 architecture provides ultra-fast transient response in switch mode power supplies**D Goder, WR Pelletier - *Proc. HFPC, 1996*[Cited by 55](#) - [Related articles](#)

On-chip transient current monitor for testing of low-voltage CMOS IC

V Stojaková, H Manhaeve, M ... ~ ... , automation and test in ..., 1999 - portal.acm.org

... due to the fact that these failures may prevent changes of the quiescent **power supply current** [5]-[6]. Therefore, the **transient power supply current testing** (I DDT testing) [7]-[8] can be conveniently used to augment the existing **test** methods and to enhance the defect coverage. ...

[Cited by 23](#) - [Related articles](#) - [All 5 versions](#)

Fault detection and input stimulus determination for the testing of analog integrated circuits based on power-supply current monitoring

G Gielen, Z Wang, W Sansen - Proceedings of the 1994 IEEE/ACM ..., 1994 - portal.acm.org

... all attempts of input signal selection, and a computationally expensive **transient** circuit simulation ... A large number of circuits under **testing**, including both the fault-free and the ... Measurements are obtained from the simulated **power-supply current** followed by a discrete frequency ...

[Cited by 51](#) - [Related articles](#) - [BL Direct](#) - [All 5 versions](#)

[CITATION] I DD pulse response testing on analog and digital CMOS circuits

JS Beasley, H Ramamurthy, J Ramirez-Angulo, M ... - Test Conference, 1993. ..., 1993

[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

[CITATION] Current sensing for built-in testing of CMOS circuits

DBI Feltham, PJ Nigh, LR Carley, W Maly - ... VLSI in Computers and Processors, 1988 ..., 1988

[Cited by 46](#) - [Related articles](#)

[CITATION] Testing embedded-core-based system chips

Y Zorian, EJ Marinissen, S Dey - Computer, 1999

[Cited by 576](#) - [Related articles](#) - [BL Direct](#) - [All 20 versions](#)

[CITATION] Test generation for current testing [CMOS ICs]

P Nigh, W Maly - IEEE Design & Test of Computers, 1990

[Cited by 138](#) - [Related articles](#) - [All 7 versions](#)

[CITATION] Transient-induced latchup testing of CMOS integrated circuits

GH Weiss, DE Young - Electrical Overstress/Electrostatic Discharge ..., 1995

[Cited by 29](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

[CITATION] Experimental results and modeling techniques for substrate noise in mixed-signal integrated circuits

DK Su, MJ Loinaz, S Masui, BA Wooley - IEEE Journal of Solid-State Circuits, 1993

[Cited by 450](#) - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)

[CITATION] A 2-ns detecting time, 2- μ m CMOS built-in **current** sensing circuit

TL Shen, JC Daly, JC Lo - IEEE Journal of solid-state circuits, 1993

[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)[PDF] **Power** distribution system design methodology and capacitor selection for modern CMOS technology[si-list.net \[PDF\]](#)

LD Smith, RE Anderson, DW Forehand, TJ ... - IEEE Transactions on ..., 1999 - si-list.net

... frequency of VRM and several bulk capacitors, b) time response of same PDS to **current transient**,c) 20 amp **current** transients at ... An HP4291 is used to measure capacitor ESR by soldering it to an SMA connector and attaching it to a **test** head through an APC-7 connector. ...[Cited by 195](#) - [Related articles](#) - [View as HTML](#) - [BL Direct](#) - [All 8 versions](#)[PDF] Digital integrated circuit **testing** using **transient** signal analysis[psu.edu \[PDF\]](#)

J Plusquellic, D Chiarulli, S Levitan - International Test Conference, 1996 - Citeseer

... 1.0 Introduction **Transient** Signal Analysis (TSA) is a new parametric **testing** method for digital integrated circuits. In TSA, tran- sients in both the voltage waveforms at selected **test** points as well as **current** transients on the **power supply** are ana- lyzed to determine the presence ...[Cited by 44](#) - [Related articles](#) - [View as HTML](#) - [BL Direct](#) - [All 14 versions](#)**IDDQ testing: A review**

JM Soden, CF Hawkins, RK Gulati, W Mao - Journal of Electronic Testing, 1992 - Springer

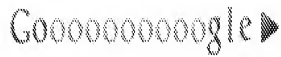
... All CMOS circuits have a relatively large **transient current** associated with switching of the logic gates. ... VO pins generally presents a noisier envi- ronment requiring a slower **test** rate. Tester **current** leakage presents a similar logic state dependent noise to the VDD pin of the IC. ...[Cited by 144](#) - [Related articles](#)**Dynamic power supply current testing** of CMOS SRAMs

J Liu, RZ Makki, A Kayssi - Journal of Electronic Testing, 2000 - Springer

... use of the dy- namic **power supply current**, i DDT, for **testing** SRAMs ... Any time a cell switches states, a measurable dynamic **power supply current** is estab- lished as a result of the induced te mporary path between ... switching of a cell will result in an unexpected **transient current** level in ...[Cited by 12](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)**CCII+ current conveyor based BIC monitor for Iddq testing** of complex CMOS circuits[psu.edu \[PDF\]](#)

V Stojakova, H Manhaeve - edtc, 1997 - computer.org

... to reduce transfer of charge that results deviations in the **power supply** during **transient** states of ... BIC monitor was originally supposed to be used for on-chip **supply current** monitoring, the ... it also in off-chip applications accepting the proper accuracy and **testing** speed degradation ...[Cited by 24](#) - [Related articles](#) - [All 9 versions](#)[Create email alert](#) ^{New!}



Result Page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#)

[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)

©2010 Google

Google scholar

transient current testing power supply fault

Search

[Advanced Scholar Search](#)[Scholar Preferences](#)
☒ Search only in Engineering, Computer Science, and Mathematics

☐ Search in all subject areas

Scholar



Articles excluding patents ▼

1970

- 2000

include citations ▼

Results 1 - 20 of about 5,290. (0.20 sec)

[CITATION] **Transient power supply current testing** of digital CMOS circuits

RZ Makki, ST Su, T Nagle - *Test Conference, 1995. Proceedings., International, 1995*Cited by 72 - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

Transient power supply current monitoring—a new test method for CMOS VLSI circuits

ST Su, RZ Makki, T Nagle - *Journal of Electronic Testing, 1995* - Springer

... to validate the idea of a "test suite" where a number of different fault coverages, for different fault types, are ... We use the transient power supply current as indicative of such switching. The iDDT test approach is not meant to compete or replace other test methods, but is meant to ...

Cited by 53 - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

[CITATION] Defect detection with **transient current testing** and its potential for deep sub-micron CMOS ICs

M Sachdev, P Janssen, V Zieren - *Test Conference, 1996. Proceedings., ..., 1998*Cited by 71 - [Related articles](#) - [All 2 versions](#)

Fault detection and input stimulus determination for the testing of analog integrated circuits based on power-supply current monitoring

G Gielen, Z Wang, W Sansen - *Proceedings of the 1994 IEEE/ACM ..., 1994* - portal.acm.org

... on the parameters of the kth type of faulty circuit, transient simulation and ... B. Bannister, "Can supply current monitoring be applied to the testing of analog as ... [3] D. Papakostas, A. Hatzopoulos, "Analogue fault identification based on power supply current spectrum," *Electronics ...*

Cited by 51 - [Related articles](#) - [BL Direct](#) - [All 5 versions](#)

Testing of static random access memories by monitoring dynamic power supply current

ST Su, RZ Makki - *Journal of Electronic Testing, 1992* - Springer

... It has also been addressed, in part, by attempting the detection of the transient (dynamic) component, /dd, of the power supply current using off-chip sensors [13].

In this article, we extend the idea of ldaa testing to lda testing. ...

Cited by 35 - [Related articles](#) - [All 2 versions](#)

[CITATION] Defect detection using power supply transient signal analysis[psu.edu](#) [PDF]A Germida, Z Yan, JF Plusquellic, F Muradali - **Test Conference**, 1999. Proceedings. ..., 1999[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)**[CITATION] Current sensing for built-in testing of CMOS circuits**DBI Feltham, PJ Nigh, LR Carley, W Maly - ... **VLSI in Computers and Processors**, 1988 ..., 1988[Cited by 46](#) - [Related articles](#)**[CITATION] Test generation for current testing [CMOS ICs]**[upc.es](#) [PDF]P Nigh, W Maly - **IEEE Design & Test of Computers**, 1990[Cited by 136](#) - [Related articles](#) - [All 7 versions](#)**[CITATION] IDD pulse response testing on analog and digital CMOS circuits**JS Beasley, H Ramamurthy, J Ramirez-Angulo, M ... - **Test Conference**, 1993. ..., 1993[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)**[CITATION] Testing embedded-core-based system chips**[psu.edu](#) [PDF]Y Zorian, EJ Marinissen, S Dey - **Computer**, 1999[Cited by 576](#) - [Related articles](#) - [BL Direct](#) - [All 20 versions](#)**[CITATION] CMOS IC stuck-open-fault electrical effects and design considerations**[psu.edu](#) [PDF]JM Soden, RK Treece, MR Taylor, CF Hawkins - **Test Conference**, 1989. ..., 1989[Cited by 65](#) - [Related articles](#) - [All 3 versions](#)**IDDQ testing: A review**JM Soden, CF Hawkins, RK Gulati, W Mao - **Journal of Electronic Testing**, 1992 - Springer

... All CMOS circuits have a relatively large **transient current** associated with switching of the logic gates ... VO pins generally presents a noisier environment requiring a slower **test rate**. Tester **current** leakage presents a similar logic state dependent noise to the VDD pin of the IC. ...

[Cited by 144](#) - [Related articles](#)**[PDF] Digital integrated circuit testing using transient signal analysis**[psu.edu](#) [PDF]J Plusquellic, D Chiarulli, S Levitan - **International Test Conference**, 1996 - Citeseer

... are based on the analysis of a circuit's parametric properties, for example, propagation delay, magnitude of **supply current** or **transient** response ... for generating logic tests have been improved over time to handle more types of **fault** behaviors, parametric **testing** strategies offer ...

[Cited by 44](#) - [Related articles](#) - [View as HTML](#) - [BL Direct](#) - [All 14 versions](#)**[CITATION] A 2-ns detecting time, 2-μm CMOS built-in current sensing circuit**TL Shen, JC Daly, JC Lo - **IEEE Journal of solid-state circuits**, 1993[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)

[CITATION] Analog fault diagnosis based on ramping power supply current signature clusters[tamu.edu \[PDF\]](#)

SAS Somayajula, E Sanchez-Sinencio, J Pineda de ... - IEEE Transactions on ..., 1996

[Cited by 37](#) - [Related articles](#) - [BL Direct](#) - [All 4 versions](#)**Dynamic power supply current testing of CMOS SRAMs**

J Liu, RZ Makkj, A Kayssi - Journal of Electronic Testing, 2000 - Springer

... Erroneous switching of a cell will result in an unexpected **transient current** level in the **power supply**. The detection of this unexpected level of **current** pulse can then be used to infer a defect.The i DDT **test** method was shown to detect all disturb **faults**, including read-destruct ...[Cited by 12](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)**[CITATION] Testing and reliable design of CMOS circuits**

NK Jha, S Kundu - 1990 - Kluwer Academic Pub

[Cited by 79](#) - [Related articles](#)**CCII+ current conveyor based BIC monitor for Iddq testing of complex CMOS circuits**[psu.edu \[PDF\]](#)

V Stojakova, H Manhaeve - edic, 1997 - computer.org

... to reduce transfer of charge that results deviations in the **power supply** during **transient** states of ... BIC monitor was originally supposed to be used for on-chip **supply current** monitoring, the ... it also in off-chip applications accepting the proper accuracy and **testing** speed degradation ...[Cited by 24](#) - [Related articles](#) - [All 9 versions](#)**[CITATION] Process-tolerant test with energy consumption ratio**

B Vinnakota, W Jiang, D Sun - Test Conference, 1998. Proceedings., International, 1998

[Cited by 35](#) - [Related articles](#) - [All 2 versions](#)**[CITATION] An approach for detecting bridging fault-induced delay faults in static CMOS circuits using dynamic power supply current monitoring**

A Walker, PK Lala - ... Workshop on IDDQ Testing, 1997. Digest of Papers., 1997

[Cited by 14](#) - [Related articles](#) - [All 4 versions](#)☒ **Create email alert** ^{New!}

Goooooooooooooogle ►

Result Page: 1 2 3 4 5 6 7 8 9 10 [Next](#)

6/7/2010

transient current testing power supply fault - Google...

transient current testing power supply

[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)

©2010 Google

Google scholar

transient current test pattern vector power suppl

Search

[Advanced Scholar Search](#)[Scholar Preferences](#)
☒ Search only in Engineering, Computer Science, and Mathematics

☐ Search in all subject areas

Scholar



Articles excluding patents ▼

1970

- 2000

include citations ▼

Results 1 - 20 of about 840. (0.19 sec)

Transient power supply current monitoring—a new test method for CMOS VLSI circuits

ST Su, RZ Makki, T Nagle - Journal of Electronic Testing, 1995 - Springer

... Note that the defect-free responses in Figures 4 and 6 are different because a different **test pattern** was used in each case. ... In the CMOS circuit also have a similar iDDT (recall that iDDT is directly computed from the **transient** portion of the AVDD waveform) **current** response. ...

[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

[CITATION] Transient power supply current testing of digital CMOS circuits

RZ Makki, ST Su, T Nagle - Test Conference, 1995. Proceedings., International, 1995

[Cited by 72](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

Testing of static random access memories by monitoring dynamic power supply current

ST Su, RZ Makki - Journal of Electronic Testing, 1992 - Springer

... It has also been addressed, in part, by attempting the detection of the **transient** (dynamic) component, iDD, of the **power supply current** using off-chip ... Application of the simple **test pattern** that is traditionally used to detect CSAFs will also yield, as a by-product, **fault** ...

[Cited by 35](#) - [Related articles](#) - [All 2 versions](#)

IDDQ testing: A review

JM Soden, CF Hawkins, RK Gulati, W Mao - Journal of Electronic Testing, 1992 - Springer

... A methodology for obtaining Selective IDD a **test patterns** was first proposed by Mat et al. [16]. ... All CMOS circuits have a relatively large **transient current** associated with switching of the logic gates. ... if the output pins are physically disconnected or tri-stated during the **test** and if ...

[Cited by 144](#) - [Related articles](#)

[CITATION] Defect detection with transient current testing and its potential for deep sub-micron CMOS ICs

M Sachdev, P Janssen, V Zieren - Test Conference, 1998. Proceedings., ..., 1998

[Cited by 71](#) - [Related articles](#) - [All 2 versions](#)

[CITATION] CMOS IC stuck-open-fault electrical effects and design considerations

JM Soden, RK Treece, MR Taylor, CF Hawkins - Test Conference, 1989. ..., 1989

[psu.edu](#) [PDF]

[Cited by 65](#) - [Related articles](#) - [All 3 versions](#)

[CITATION] **Test generation for current testing [CMOS ICs]**

[upc.es](#) [PDF]

P Nigh, W Maly - IEEE Design & Test of Computers, 1990

[Cited by 138](#) - [Related articles](#) - [All 7 versions](#)

[PDF] **Defect classes-an overdue paradigm for CMOS IC testing**

[psu.edu](#) [PDF]

CF Hawkins, JM Soden, AW Righter, FJ ... - International Test ..., 1994 - Citeseer

... IDDO (ZLs,sJ tests measure the quiescent V_{cc} (YsJ **power supply current** of the IC [21]. ... The Z_{cc} pseudo stuck-at-fault (PSAF) **test** applies a SAF **vector pattern** to the input nodes of each logic gate, but only propagates the signal to that gate's output node [42, 47]. ...

[Cited by 171](#) - [Related articles](#) - [View as HTML](#) - [All 6 versions](#)

[CITATION] **A test pattern generation methodology for low power consumption**

[psu.edu](#) [PDF]

E Corno, P Prinetto, M Rebaudengo, MS Reorda, DA e ... - 16th IEEE VLSI Test ..., 1998

[Cited by 65](#) - [Related articles](#) - [All 6 versions](#)

[CITATION] **IDD pulse response testing on analog and digital CMOS circuits**

JS Beasley, H Ramamurthy, J Ramirez-Angulo, M ... - Test Conference, 1993. ..., 1993

[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

[CITATION] **Electrical properties and detection methods for CMOS IC defects**

JM Soden, CF Hawkins - European Test Conference, 1989., Proceedings of the ..., 1989

[Cited by 87](#) - [Related articles](#) - [All 5 versions](#)

[PDF] **Test challenges for deep sub-micron technologies**

[psu.edu](#) [PDF]

KT Cheng, S Dey, M Rodgers, K Roy - Design Automation Conference, 2000 - Citeseer

... This technique uses a Genetic Algorithm-based approach to generate **patterns** that maximize the ... IC's maximum operating frequency (F_{max}) to establish a multi-parameter **test** technique for ... intrinsic and extrinsic (defect) leakages in IC's with high background stand-by **current** ...

[Cited by 82](#) - [Related articles](#) - [View as HTML](#) - [BL Direct](#) - [All 18 versions](#)

IDDT testing versus IDDQ testing

Y Min, Z Li - Journal of Electronic Testing, 1998 - Springer

... where δ shows the variation times of average **transient current** between the **fault-free** and faulty circuits ... The IDDT **test** generation is to find a **test vector** pair to maximize the value of given by (6) for ... resolution limit, the **fault** is IDDT testable, and $\{v_1, v_2\}$ is then the **test pattern** pair to ...

[Cited by 16](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)

[CITATION] **Multi neural network based fault area estimation for high speed protective relaying**

T Dalstein, T Friedrich, B Kulicke, D Sobajic - IEEE Transactions on Power Delivery, 1996

[Cited by 43](#) - [Related articles](#) - [BL Direct](#) - [All 4 versions](#)

[CITATION] Estimation for maximum instantaneous **current** through **supply** linesfor CMOS circuits

[psu.edu](#) [PDF]

YM Jiang, A Krstic, KT Cheng, MV Synopsys - ... on Very Large Scale Integration (VLSI ... , 2000

[Cited by 36](#) - [Related articles](#) - [BL Direct](#) - [All 10 versions](#)

[CITATION] Analog **fault** diagnosis based on ramping **power supply** currents signature clusters

[tamu.edu](#) [PDF]

SAS Somayajula, E Sanchez-Sinencio, J Pineda de ... - IEEE Transactions on ... , 1996

[Cited by 37](#) - [Related articles](#) - [BL Direct](#) - [All 4 versions](#)

[CITATION] Iddq testing for CMOS VLSI

[psu.edu](#) [PDF]

R Rajsuman, AARD Center, CA Santa Clara - Proceedings of the IEEE, 2000

[Cited by 144](#) - [Related articles](#) - [BL Direct](#) - [All 14 versions](#)

[CITATION] **Test** method evaluation experiments and data

[psu.edu](#) [PDF]

P Nigh, A Gattiker - **Test** Conference, 2000. Proceedings. International, 2000

[Cited by 84](#) - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)

Monitoring **power** dissipation for **fault** detection

B Vinnakota - Journal of Electronic Testing, 1997 - Springer

... tor. In [3] the shape of the **transient** response is used as a guide to **fault** detection.

The ... speed. This will increase **test** time markedly. The **fault** coverage is determined

by the minimum observable deviation in the **supply current**. This ...

[Cited by 43](#) - [Related articles](#) - [BL Direct](#) - [All 11 versions](#)

[CITATION] IDDQ testing of CMOS opens: An experimental study

AD Singh, H Rasheed, WW Weber - **Test** Conference, 1995. Proceedings., ... , 1995

[Cited by 43](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

☒ Create email alert ^{New!}

Goooooooooooooogle ►

Result Page: 1 2 3 4 5 6 7 8 9 10 [Next](#)

transient current test pattern vector pr

Search

[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)

©2010 Google

Google scholar

transient current test power supply fault pattern

Search

[Advanced Scholar Search](#)[Scholar Preferences](#)
☒ Search only in Engineering, Computer Science, and Mathematics

☐ Search in all subject areas

Scholar



Articles excluding patents ▼

1970

- 2000

include citations ▼

Results 1 - 20 of about 2,330. (0.50 sec)

[CITATION] Transient power supply current testing of digital CMOS circuitsRZ Makki, ST Su, T Nagle - *Test Conference, 1995. Proceedings., International, 1995*[Cited by 72](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)**Transient power supply current monitoring—a new test method for CMOS VLSI circuits**ST Su, RZ Makki, T Nagle - *Journal of Electronic Testing, 1995 - Springer*

... This requires, in part, the use of **fault** isolation circuitry for each pseudo-partition (see Section 4.2). ... This algorithm includes the following two steps. Step 1. In this step the **test** vectors are generated. ... Page 9. **Transient Power Supply Current Monitoring** 31 ...

[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)**Testing of static random access memories by monitoring dynamic power supply current**ST Su, RZ Makki - *Journal of Electronic Testing, 1992 - Springer*

... It has also been addressed, in part, by attempting the detection of the **transient** (dynamic) component, /dd, of the **power supply current** using off-chip ... Application of the simple **test pattern** that is traditionally used to detect CSAFs will also yield, as a by-product, **fault** ...

[Cited by 35](#) - [Related articles](#) - [All 2 versions](#)**[CITATION] Test generation for current testing [CMOS ICs]**P Nigh, W Maly - *IEEE Design & Test of Computers, 1990*[Cited by 138](#) - [Related articles](#) - [All 7 versions](#)[upc.es \(PDF\)](#)**Fault detection and input stimulus determination for the testing of analog integrated circuits based on power-supply current monitoring**G Gielen, Z Wang, W Sansen - *Proceedings of the 1994 IEEE/ACM ..., 1994 - portal.acm.org*

... 9;. Repeat fix different l types of faulty circuit Sampling on the parameters of the kth type of faulty circuit, **transient** simulation and discrete frequency crans formation to obtain 9(.). qpl,) ... 9, ...

References [1] P. Nigh, W. Maly, "Test generation for current testing," IEEE ...

[Cited by 51](#) - [Related articles](#) - [BL Direct](#) - [All 5 versions](#)[york.ac.uk \(PDF\)](#)**[CITATION] Defect detection with transient current testing and its potential for deep sub-micron CMOS ICs**

6/7/2010

transient current test power supply fault pattern OR...

M Sachdev, P Janssen, V Zieren - **Test Conference**, 1998. Proceedings., ..., 1998

[Cited by 71](#) - [Related articles](#) - [All 2 versions](#)

[CITATION] **A test pattern generation methodology for low power consumption**

[psu.edu](#) [PDF]

E Corno, P Prinetto, M Rebaudengo, MS Reorda, DA e ... - 16th IEEE VLSI Test ..., 1998

[Cited by 65](#) - [Related articles](#) - [All 6 versions](#)

[CITATION] **Process-tolerant test with energy consumption ratio**

B Vinnakota, W Jiang, D Sun - **Test Conference**, 1998. Proceedings., International, 1998

[Cited by 35](#) - [Related articles](#) - [All 2 versions](#)

[CITATION] **IDD pulse response testing on analog and digital CMOS circuits**

JS Beasley, H Ramamurthy, J Ramirez-Angulo, M ... - **Test Conference**, 1993. ..., 1993

[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

[CITATION] **A 2-ns detecting time, 2- μ m CMOS built-in current sensing circuit**

TL Shen, JC Daly, JC Lo - **IEEE Journal of solid-state circuits**, 1993

[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)

[CITATION] **Defect detection using power supply transient signal analysis**

[psu.edu](#) [PDF]

A Gernida, Z Yan, JF Plusquellic, F Muradali - **Test Conference**, 1999. Proceedings., ..., 1999

[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)

[CITATION] **Analog fault diagnosis based on ramping power supply current signature clusters**

[tamu.edu](#) [PDF]

SAS Somayajula, E Sanchez-Sinencio, J Pineda de ... - **IEEE Transactions on** ..., 1996

[Cited by 37](#) - [Related articles](#) - [BL Direct](#) - [All 4 versions](#)

[CITATION] **CMOS IC stuck-open-fault electrical effects and design considerations**

[psu.edu](#) [PDF]

JM Soden, RK Treece, MR Taylor, CF Hawkins - **Test Conference**, 1989. ..., 1989

[Cited by 65](#) - [Related articles](#) - [All 3 versions](#)

[PDF] **Defect classes-an overdue paradigm for CMOS IC testing**

[psu.edu](#) [PDF]

CF Hawkins, JM Soden, AW Righter, FJ ... - **International Test** ..., 1994 - Citeseer

... **supply current** of the IC [21]. ... Many companies perform some form of I_{cc} testing, such as **power** down tests, with a small set of testpatterns (vectors ... The Z₀ pseudo stuck-at-fault (PSAF) **test** applies a SAF **vector pattern** to the input nodes of each logic gate, but only propagates the ...

[Cited by 171](#) - [Related articles](#) - [View as HTML](#) - [All 6 versions](#)

IDDQ testing: A review

JM Soden, CF Hawkins, RK Gulati, W Mao - **Journal of Electronic Testing**, 1992 - Springer

... All CMOS circuits have a relatively large **transient current** associated with switching of the logic

6/7/2010

transient current test power supply fault pattern OR...

gates. ... I/O pins generally presents a noisier environment requiring a slower **test** rate. Tester **current** leakage presents a similar logic state dependent noise to the VDD pin of the IC. ...

[Cited by 144](#) - [Related articles](#)

[CITATION] **Increased cmos ic stuck-at fault coverage with reduced i ddq test sets**

RR Fritzscheier, JM Soden, RK Treece, CF Hawkins - **Test Conference**, 1990. ..., 1990

[Cited by 74](#) - [Related articles](#)

Monitoring power dissipation for fault detection

B Vinnakota - **Journal of Electronic Testing**, 1997 - Springer

... tor. In [3] the shape of the **transient** response is used as a guide to **fault** detection.

The ... speed. This will increase **test** time markedly. The **fault** coverage is determined

by the minimum observable deviation in the **supply current**. This ...

[Cited by 43](#) - [Related articles](#) - [BL Direct](#) - [All 11 versions](#)

[CITATION] **Test method evaluation experiments and data**

P Nigh, A Gattiker - **Test Conference**, 2000. Proceedings. International, 2000

[Cited by 84](#) - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)

[psu.edu](#) [PDF]

[CITATION] **Electrical properties and detection methods for CMOS IC defects**


JM Soden, CF Hawkins - **European Test Conference**, 1989., Proceedings of the ..., 1989

[Cited by 87](#) - [Related articles](#) - [All 5 versions](#)

[CITATION] **Testing and reliable design of CMOS circuits**

NK Jha, S Kundu - 1990 - Kluwer Academic Pub

[Cited by 79](#) - [Related articles](#)

 [Create email alert](#) ^{New!}

Google

Result Page: 1 2 3 4 5 6 7 8 9 10 [Next](#)

transient current test power supply fault pattern OR...

[Search](#)

[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)

Google scholar

"transient current" test power supply fault patter

Search

[Advanced Scholar Search](#)[Scholar Preferences](#)☒ Search only in Engineering, Computer Science, and Mathematics☐ Search in all subject areas

Scholar



Articles excluding patents ▼

1970

- 2000

include citations ▼

Results 1 - 20 of about 172. (0.28 sec)

[CITATION] Transient power supply current testing of digital CMOS circuitsRZ Makki, ST Su, T Nagle - *Test Conference, 1995. Proceedings., International, 1995*[Cited by 72](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)**Testing of static random access memories by monitoring dynamic power supply current**ST Su, RZ Makki - *Journal of Electronic Testing, 1992* - Springer... of the logic state of a memory cell results in a **transient current** pulse in the ... Keywords:Current-testable design, dynamic current monitors, dynamic **power supply** current, **fault** modeling,**pattern** sensitivity. ... there have been a number of studies aimed at reducing the **test** length [2]-[9] ...[Cited by 35](#) - [Related articles](#) - [All 2 versions](#)**[CITATION] Defect detection with transient current testing and its potential for deep sub-micron CMOS ICs**M Sachdev, P Janssen, V Zieren - *Test Conference, 1998. Proceedings., ..., 1998*[Cited by 71](#) - [Related articles](#) - [All 2 versions](#)**[CITATION] A test pattern generation methodology for low power consumption**E Corio, P Prinetti, M Rebaudengo, MS Reorda, CA e ... - *16th IEEE VLSI Test ...*, 1998[Cited by 65](#) - [Related articles](#) - [All 6 versions](#)[psu.edu](#) [PDF]**[CITATION] Process-tolerant test with energy consumption ratio**B Vinnakota, W Jiang, D Sun - *Test Conference, 1998. Proceedings., International, 1998*[Cited by 35](#) - [Related articles](#) - [All 2 versions](#)**[CITATION] I DD pulse response testing on analog and digital CMOS circuits**JS Beasley, H Ramamurthy, J Ramirez-Angulo, M ... - *Test Conference, 1993. ..., 1993*[Cited by 53](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)**[CITATION] A 2-ns detecting time, 2- μ m CMOS built-in current sensing circuit**TL Shen, JC Daly, JC Lo - *IEEE Journal of solid-state circuits, 1993*[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)

[citation] Defect detection using **power supply** transient signal analysis[psu.edu](#) [PDF]A Germida, Z Yan, JF Plusquellic, F Muradali - **Test** Conference, 1999. Proceedings., 1999[Cited by 44](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)IDDQ testing: A reviewJM Soden, CF Hawkins, RK Gulati, W Mao - *Journal of Electronic Testing*, 1992 - Springer

... All CMOS circuits have a relatively large **transient current** associated with switching of the logic gates. ... I/O pins generally presents a noisier environment requiring a slower **test** rate. ... One proposed design integrates the IDD Q monitor into the **power supply** in an attempt to reduce ...

[Cited by 144](#) - [Related articles](#)[citation] **Test** method evaluation experiments and data[psu.edu](#) [PDF]P Nigh, A Gattiker - **Test** Conference, 2000. Proceedings. International, 2000[Cited by 84](#) - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)[citation] Electrical properties and detection methods for CMOS IC defectsJM Soden, CF Hawkins - *European Test Conference*, 1989., Proceedings of the, 1989[Cited by 87](#) - [Related articles](#) - [All 5 versions](#)[citation] Testing embedded-core-based system chips[psu.edu](#) [PDF]Y Zorian, EJ Marinissen, S Dey - *Computer*, 1999[Cited by 576](#) - [Related articles](#) - [BL Direct](#) - [All 20 versions](#)Dynamic **power supply** current testing of CMOS SRAMsJ Liu, RZ Makkij, A Kayssi - *Journal of Electronic Testing*, 2000 - Springer

... Erroneous switching of a cell will result in an unexpected **transient current** level in the **power supply**. ... The i DDT **test** method was shown to detect all disturb **faults**, including read-destruct **faults** using a short **test** length of $5n$ where n is the number of cells, but this **test** method ...

[Cited by 12](#) - [Related articles](#) - [BL Direct](#) - [All 12 versions](#)IDDQ testing versus IDDQ testingY Min, Z Li - *Journal of Electronic Testing*, 1998 - Springer

... When some inputs change from logic 1(0) to logic 0(1), the **power supply** current ... where δ shows the variation times of average **transient current** between the **fault-free** and faulty circuits. ... hardware resolution limit, the **fault** is IDDQ testable, and $\{v_1, v_2\}$ is then the **test pattern** pair to ...

[Cited by 16](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)[citation] Comparison of defect detection capabilities of current-based and voltage-based **test** methods[lirmm.fr](#) [PDF]B Kruseman - *IEEE European Test Workshop*, 2000. Proceedings, 2000[Cited by 17](#) - [Related articles](#) - [All 5 versions](#)

[CITATION] Iddq testing for CMOS VLSI

R Rajsuman, AARD Center, CA Santa Clara - Proceedings of the IEEE, 2000

[Cited by 144](#) - [Related articles](#) - [BL Direct](#) - [All 14 versions](#)[psu.edu \[PDF\]](#)**[CITATION] Experimental analysis of transient current testing based on charge observation**

J Segura, I De Paul, M Roca, E Isem, CF Hawkins - Electronics Letters, 1999

[Cited by 10](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)**[PDF] Design of a built-in current sensor for IDDQ testing**JB Kim, SJ Hong, J Kim - IEEE J. Solid-State Circuits, 1998 - [iroi.seu.edu.cn](#)


... is typically on the order of tens of nanoamperes, while the **transient current** may reach ... Therefore, the average **power** dissipation overhead is about 12.4% due to the in ... Future work includes automatic **test** equipment interfacing, **test pattern** generation, and partitioning of large ...

[Cited by 29](#) - [Related articles](#) - [View as HTML](#) - [BL Direct](#) - [All 4 versions](#)[seu.edu.cn \[PDF\]](#)**[CITATION] i DD pulse response testing applied to complex CMOS ICs**

JS Beasley, AW Righter, CJ Apodaca, S Pour-Mozafari, ... - Test Conference, 1997. ..., 1997

[Cited by 24](#) - [Related articles](#) - [BL Direct](#) - [All 3 versions](#)**[CITATION] Transient current testing based on current (charge) integration**

I De Paul, R Picos, JL Rossello, M Roca, E Isem, J ... - 1998 IEEE International ..., 1998

[Cited by 10](#) - [Related articles](#) - [All 5 versions](#) [Create email alert](#) ^{New!}

Goooooooooogle ►

Result Page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [Next](#)["transient current" test power supply](#) [Search](#)[Go to Google Home](#) - [About Google](#) - [About Google Scholar](#)